

PATENT CLAIMS

1. Gene transfer vector, comprising
 - the YB-1 promoter, its mutants or deletion variants,
 - a transgene or the cDNA of a transgene
 - two multi-cloning sites (MCS) suited to cutting out the transgene for restriction enzymes surrounding the transgene.
2. Gene transfer vector according to Claim 1, wherein the transgene is a therapeutic gene.
3. Gene transfer vector according to Claim 1, wherein the transgene is a reporter gene.
4. Gene transfer vector according to Claims 1 and 2, wherein the therapeutic gene is a cell-cycle regulating or a proapoptotic gene.
5. Gene transfer vector according to Claims 1, 2 and 4, wherein p16, p21, p53 or Bax is used as a therapeutic gene.
6. Gene transfer vector according to Claims 1-5, wherein a regulating element is additionally inserted into the vector.

7. Gene transfer vector according to Claim 1-6, wherein the multi-cloning sites (MCS) contain at least 3 enzyme restriction sites interfaces for restriction enzymes.

8. Gene transfer vector according to Claims 1-7, wherein the multi-cloning sites (MCS) contain enzyme restriction sites for restriction enzymes 5-10.

9. Gene transfer vector according to Claims 1-8, wherein the multi-cloning sites (MCS) for restriction enzymes contain no enzyme restriction sites occurring within the sequences of the YB-1 promoter.

10. Gene transfer vector according to Claims 1-9, wherein the multi-cloning sites (MCS) contain sticky enzyme restriction sites and blunt enzyme restriction sites for restriction enzymes.

11. Use of the vector according to Claims 1-10 for the treatment of tumours.

12. Use of the vector according to Claims 1-10 for the treatment of chemo-resistant tumours.

13. Use of the vector according to Claims 1-10 for the treatment of chemo-sensitive tumours.

14. Use of the vector according to Claims 1-10 for the treatment of breast cancer.

15. Use of the vector according to Claims 1-10 for the micro-localisation of tumours.